



# UNITED STATES PATENT AND TRADEMARK OFFICE

*mn*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,523	08/30/2005	Vincent Deveaud	S1022.81039US00	8305
46329 7590 06/01/2007 STMicroelectronics Inc. c/o WOLF, GREENFIELD & SACKS, P.C. 600 Atlantic Avenue BOSTON, MA 02210-2206			EXAMINER CAO, CHUN	
			ART UNIT 2115	PAPER NUMBER
			MAIL DATE 06/01/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/528,523	<b>Applicant(s)</b> DEVEAUD ET AL.	
	<b>Examiner</b> Chun Cao	<b>Art Unit</b> 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 5-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-11 are presented for examination.
2. The text of those applicable section of Title 35, U.S. Code not included in this action can be found in the prior Office Action.
3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Election/Restrictions***

4. Newly submitted claims 5-11 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Original claimed of claims 1-4, drawn to: randomly distributing supply power in the predetermined time window, classified in class 713, subclass 300.

Claims 5-11, drawn to: supplying power randomly to an asynchronous processing element so as to mask data being processed by the asynchronous processing element without adding to the power consumption of the asynchronous processing element, classified in class 713, subclass 320.

- a. These inventions have acquired a separate status in the art as shown by their different classification;
- b. The search required for one Group is not required for the other Groups for the reasons above restriction for examination purpose as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for

Art Unit: 2115

prosecution on the merits. Accordingly, claims 5-11 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 2, the specification fails to disclose that the total power is determined according to a maximum possible power consumption of the calculation element.

Note that the section on page 2, lines 20-22 cited by applicant in the response filed May 14, 2007, only appears to provide support for " supply variable power to the asynchronous processing element".

It does not appear that cited section provides sufficient support for the aforementioned limitations of claim 2. Applicant is required to provide support for the aforementioned limitations of claim 2- if the for the aforementioned limitations of claim 2 do not generally correspond to the aforementioned limitations of claim 2.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, It is not clearly understand what is mean by: in line 1, "a method for supplying an asynchronous...", it should be -- a method for supplying **power to** an asynchronous... --; in line 3, "an instantaneous supply power of the asynchronous..", it should be -- an instantaneous supply power **to** the asynchronous...--.

Claim 2 is rejected because they incorporate the deficiencies of claim 1.

As per claim 3, It is not clearly understand what is mean by: "a circuit for supplying at least one asynchronous...", it should be -- a circuit for supplying **power to** at least one asynchronous... --.

Claim 4 is rejected because they incorporate the deficiencies of claim 3.

9. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Timm et al. (Timm)<sup>1</sup>, U.S. patent no. 6,827,278.

As per claim 3, Tim discloses a circuit [figures 1-3] for supplying power to at least one asynchronous calculation element of an integrated circuit [col. 5, lines 13-27], comprising a variable supply element configured to randomly distribute in a predetermined time window ["clock T is determined"; col. 6, lines 43-64; col. 9, lines 16-21 ], an instantaneous energy provided to the asynchronous calculation element, a total power ["It fixes the consumption of electrical energy in respect of its variation in time"] in

---

<sup>1</sup> Timm is a reference cited by applicant.

Art Unit: 2115

the predetermined time window being predetermined [col. 6, lines 43-64; col. 7, lines 36-59; col.4, lines 8-12; col. 9, line 51-col. 10, line 12].

As per claim 4, Timm discloses that the variable supply element is controlled by a pseudo-random generator [figures 1, 3; col. 6, lines 54-64; col. 9, lines 16-21, 51-57].

As to claims 1-2, Claims 3-4 basically are the corresponding elements that are carried out the method of operating steps in claims 1-2. Accordingly, claims 1-2 are rejected for the same reason as set forth in claims 3-4.

10. Applicant's arguments filed on 5/14/07, which have been fully considered but they are not persuasive. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao whose telephone number is 571-272-3664. The examiner can normally be reached on Monday-Friday from 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 571-272-2100.

Art Unit: 2115

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 29 2007



**CHUN CAO  
PRIMARY EXAMINER**